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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,863	09/29/2003	Ju-hwan Kim	1572.1100	5397

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EXAMINER

STERLING, AMY JO

ART UNIT	PAPER NUMBER
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3632

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/671,863	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> Amy J. Sterling	<b>Art Unit</b> 3632	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-25, 30, 32, 35 and 38 is/are rejected.
- 7) ☒ Claim(s) 7, 26-29, 31, 33, 34, 36 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This is the first Office Action for application number 10/671,863, Display Apparatus, filed on 9/29/03. Claims 1-38 are pending.

### ***Information Disclosure Statement***

The information disclosure statement submitted on 9/29/03 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the pair of sliders" in line 4. There is insufficient antecedent basis for this limitation in the claim.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "main body" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-6, 30, 32 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent Publication No. 2004/0056161 to Ishizaki et al.

The Publication to Ishizaki et al. discloses a display apparatus having a base part (13), a main body (D) a pair of sliders (31, 32) connected to the main body (D), a pair of parallel guide rails (14, 15), where the sliders are drawn out to a predetermined distance by an upward movement along the guide rails. Ishizaki et al. also teaches a first and second spiral springs (2) having a wound part having a spiral shape and a coupling part extended from the wound part, enough elasticity to support the weight of the main body, a guide bracket (4) coupled to the guide rails, a spring supporting block (43, 44) between the sliders wherein the spiral spring has a first edge of the wound part coupled to the guide bracket and a second end of the coupling part coupled to the spring

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supporting block (43, 44), and four accommodating parts, one on the inner front face of the guide bracket (42), one on the inner rear face (unmarked, the inner rear face of the guide bracket) of the guide bracket and to on both sides of the guide bracket (unmarked on both sides of the guide bracket inner face), and a stand support part (11) on the base part (13) to accommodate a space for the guide rails.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 8, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6609686 to Malizia.

Malizia discloses a device (10) having a base part (16), a main body (26), a slider (14) connected to the main body, a guide rail (12) and a spiral spring (38) with a ball bearing unit (34) provided between the guide rail (12) and the slider (14) and a supporting pin (32) disposed between the guide rail and the slider and positioned along lengthwise direction of the guide rail and the rolling ball rollably installed on the supporting pin (32) between the guide rail and the slider and contacted with the slider rolling motion and a supporting bracket provided between the main body (26) and the guide bracket, the supporting bracket having a supporting part (25) to support the main body and an extended part (24) extended downward from the supporting part and coupled to the slider (14).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-25 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 2004/0056161 to Ishizaki et al. as applied to claims 1-6 above, and in view of United States Patent No. 6609686 to Malizia.

Ishizaki et al. discloses applicant's basic inventive concept, all the elements which are shown above and including a supporting bracket (H') provided between the main body (D) and the guide bracket, the supporting bracket having a supporting part (105) to support the main body and an extended part (101) extended downward from the supporting part and coupled to the slider.

Ishizaki et al. does not show with a ball bearing unit provided between the guide rail and the slider and a supporting pin disposed between the guide rail and the slider and positioned along lengthwise direction of the guide rail and the rolling ball rollably installed on the supporting pin between the guide rail and the slider and contacted with the slider rolling motion. Ishizaki et al. also does not teach the stainless steel with a thickness of .2mm to .35 mm. It would have been obvious to one having ordinary skill in

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the art at the time the invention was made to use any suitable material such as stainless steel with a thickness of this range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. See In re Aller, 105 USPQ 233,

Malizia shows a device (10) having a base part (16), a main body (26), a slider (14) connected to the main body, a guide rail (12) a ball bearing unit (34) provided between the guide rail (12) and the slider (14) and a supporting pin (32) disposed between the guide rail and the slider and positioned along lengthwise direction of the guide rail and the rolling ball rollably installed on the supporting pin (32) between the guide rail and the slider and contacted with the slider rolling motion, the ball bearing unit used to prevent frictional wear between the slide unit and the guide rail. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teachings of Malizia to have added a ball bearing unit as described above in order to reduce frictional wear on the unit.

### ***Allowable Subject Matter***

Claims 7, 26-29, 31, 33, 34, 36 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The reason is that the prior art does not teach that the first and second spring guides are rotatably installed on the first and second rotational shafts on which the wound parts of the two spiral springs are respectively wound and where the spring



supporting block is coupled to the sliders and perform a sliding motion with the movement of these sliders.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following documents show various stands with sliders and guide rails

2004/0084588 to Liu et al.

2004/0084585 to Watanabe et al.

2004/0011932 to Duff

2003/0075649 to Jeong et al.

6766994 to Serbinski et al.

6712321 to Su et al.

6702238 to Wang

6695266 to Tsai

Any inquiry concerning this communication should be directed to Amy J. Sterling at telephone number 703-308-3271. The examiner can normally be reached (M-F 8 a.m.-5:00 p.m.). If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Leslie Braun can be reached at 703-308-2156. The fax machine

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number for the Technology center is 703-872-9306 (formal amendments) or 703-308-3519 (informal amendments/communications).

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist at 703-308-2168.



AJS  
Amy J. Sterling  
8/31/04



ANITA KING  
PRIMARY EXAMINER